

**NPDES COMPLIANCE INSPECTION REPORT
PUGET SOUND NAVAL SHIPYARD
BREMERTON, WASHINGTON**

FACILITY: Puget Sound Naval Shipyard
1400 Farragut Avenue
Bremerton, Washington 98314-5001

CONTACT: Bruce Beckwith, Water Program Manager
Environmental Health and Safety Office
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NPDES PERMIT: WA-000206-2
Effective Date: April 1, 1994
Expiration Date: April 1, 1999

INSPECTION DATE: April 21-22, 2008

(Entry: 09:00 a.m.)
(Exit: 15:00 p.m.)
(Entry: 08:30 a.m.)
(Exit: 14:45 p.m.)

REPORT DATE: April 21-22, 2008

GIS DATA: N 47 56212
W 22.63729
File #11
This was taken from HQ command bldg

SIC: 4952

INSPECTOR: Eileen Hileman, Inspector
Environmental Services Unit
Office of Environmental Assessment
EPA Region 10



Note to program: The facility requires all personnel entering the shipyards to wear steel-toed boots, safety glasses and hard hat. Safety hazards include machinery, mobile equipment, dust, grit. The facility also does not allow photography equipment of any kind (including cell phones). If you want photographs, the facility (if notified in advance), will provide a photographer.

In addition, inspectors are no longer allowed to drive a car (POV or GOV) on to this facility regardless of the amount of advanced notice provided to the facility. You must park and pay at one of the lots in downtown Bremerton and then have the facility pick you up. Be aware that because all government employees assigned to PSNS must also park in

downtown Bremerton, unless you arrive in downtown Bremerton early, parking places anywhere near PSNS are scarce. If coming from Seattle, I suggest taking a taxi from ferry or having the facility pick you up at the ferry.

BACKGROUND

The Puget Sound Naval Shipyard (PSNS) occupies over 1500 acres on the waterfront of Bremerton, Washington. It includes six dry docks, more than a dozen piers, moorings, and multiple buildings. PSNS employs the largest workforce in Kitsap County. The main operations at this facility include the overhaul, alteration, repair, maintenance, and dry-docking of surface ships and submarines. PSNS is also homeport for a number of Navy ships. Recently, the primary activity at the shipyard has been dismantling and recycling of nuclear submarines. A copy of the general layout diagram is appended to this inspection report as Attachment I.

Several years ago (after the permit re-application was sent to EPA) the Navy reorganized this facility. All buildings, structures, docks, utilities, sewer system, etc. are now owned by the Command Naval Installation. The Command Naval Installation also has responsibility for maintenance of these facilities and all related equipment. NAVSEA (which is an entirely different organization) is tasked with operations (environmental compliance, operations inside the docks, etc.). This reorganization impacts the current administratively extended permit as well as any permits issued in the future in that this new structure means that the only level at which these two Commands intersect is at the level of the Secretary of the Navy. Recent case in point – several of the violations noted in the most recent NOV issued to this facility involved maintenance issues at the Steam Plant. The environmental group has no control over maintenance at the steam plant as maintenance falls under an entirely separate command. The issue is being initially addressed by having the Commander of NAVSEA sent a letter to the Command Naval Installation. However, cooperation in address the matter lies in the hands of the Commander at Command Naval Installation not at NAVSEA (where the Environmental Compliance Unit is housed). While I am certain both Commands are committed to environmental compliance the difficulty of trying to use one permit to address issues of operation and maintenance in one permit as well as storm water, etc. will be difficult.

COMPLIANCE HISTORY

This facility was previously inspected by a EPA Region 10 inspector in 2006. This facility has had an administratively extended permit since 1999. According to Bruce Beckwith during the intervening years, EPA permit staff twice told facility officials that they would be provided with a pre-draft so that the facility could begin reviewing the proposed limits. The pre-draft was never provided and facility staff stated they were recently told by the current NPDES Permits Unit Manager that the permit backlog was such that no pre-drafts could be provided and that there would be little dialogue with the facility prior to the proposed permit being sent out for public comments. There have been significant changes to the facility since the permit re-application was submitted and I would suggest the permit writer assigned to this facility at least get an update from the facility prior to writing the permit.

ENTRY/INTRODUCTION

On Monday, April 21, 2008, at I entered the facility at 09:00 a.m. accompanied by Bruce Beckwith who had picked me up at the parking lot in downtown Bremerton and accompanied me through the gates of the facility. Upon arrival at Mr. Beckwith's office we were joined by Gerald M. Sherrell, Petronilla Dickerson, Jeff Cizek and Leslie Cole. I presented my credentials to all those present explained my intention to conduct an NPDES compliance evaluation inspection of the PSNS facility. The facility had been notified in advance that I would be conducting this inspection. After a brief overview by Mr. Beckwith, I requested to begin the inspection with a file review.

RECORDS REVIEW

I began my review by reviewing the DMRs for the past eighteen months.

The permit for this facility states in I.A.1. *"During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge dry-dock drainage and noncontact cooling water from outfalls 018 (including 018A and 096), treated steam plant wastewater from outfall 021, and stormwater runoff, demineralized water, steam condensate, saltwater supply system, and potable water from the remaining outfalls."*

Section I.A.1.a. of the permit states *"Such discharges shall be limited and monitored by the permittee as specified below:*

Discharge Limitations

<u>Outfall Number</u>	<u>Effluent Unit of Characteristic</u>	<u>Monthly Daily Measurement</u>	<u>Average</u>	<u>Sampling. Maximum</u>	<u>Sample Frequency</u>	<u>Type</u>
018, 018A and 96	Flow	MGD	---	---	Wkly	Est
	Oil & Grease	mg/l	10	15	Wkly	Grab
	Copper	mg/l	0.019	0.033	Wkly	Grab
	(Total Recov)	lbs/day	0.44	0.77	Wkly	Grab
	Lead, Mercury Zinc, Copper (Total Recoverable)	mg/l	---	---	Monthly ¹	24 hr comp
	Temperature	F	---	---	Monthly	Grab
	PCBs	mg/L	---	---	Monthly ¹	Grab
	WET	---	---	---	Per Part I.C.	
019	Flow	MGD	---	---	Wkly	Est.
	O & G	mg/L	10	15	Wkly	Grab

021	Copper (Total Recov)	mg/l Lbs/day	0.019 0.83	0.033 1.44	Wkly Wkly	Grab Grab
	Lead, Mercury Zinc, Copper (Total Recoverable)	mg/l	---	---	Monthly ¹	24 hr
	Temperature	F	---	---	Monthly	Grab
	PCBs	mg/L	---	---	Monthly ¹	Grab
	WET	---	---	---	Per Part I.C.	
	Flow	MGD	0.17		Continuous	Record
	Temp.	F	70 (winter) 75 (summer)	90 (winter) 90 (summer)	Daily	Grab
	Oil & Grease	mg/l Lbs/day	10 14.18	15 21.28	Daily Daily	Grab Grab
	TSS	mg/L Lbs/day	30 42.53	100 141	3/7 days	24 hr Comp.
	Total Residual Chlorine	mg/l	---	0.20	Daily ²	Grab
	Free Available Chlorine	mg/l	0.20	0.50	Daily ²	Grab
	Chromium ³ (Total Recoverable)	mg/l	0.20	0.20	Wkly	Grab
	Zinc ³ (Total Recoverable)	mg/l	1.0	1.0	Wkly	Grab
	pH	S.U.	(1)		Daily	Grab

(1) pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored continuously.....

- 1 Monitoring shall be conducted for one year.
2. Monitoring for these parameters is required only in the event that use of chlorine is resumed.
- 3 Limitations and monitoring requirements for these parameters apply to wastewater flow from the air compressor cooling tower blowdown and diesel generator cooling tower blowdown before it is co-mingled with other wastestreams.

The facility was issued a NOV for five years of violations of permit limits in February 08. Fifty-six of the violations are from the PSNS & IMF dry-dock drainage systems and involved violations of the copper limit. Five of the violations were from outfall 021 which is the treated effluent from the steam plant. The five violations from the steam plant that occurred as a result of maintenance problems (see discussion of reorganization above). Appended to this inspection report as Attachment II is copy of the facility's response to the NOV.

The facility continued to violate the copper limit in January and February 08. Letters regarding these violations were appended to the DMRs submitted to EPA Region 10.

I reviewed the bench sheets and analytical data for eighteen months of DMRs. No problems were noted.

Section I.E. of the permit states "the permittee shall submit to EPA, Region 10, Water Division, results of future sediment monitoring conducted as required by Washington Department of Ecology, Toxic Cleanup Program and EPA's Superfund Program. Sediment monitoring information available from each preceding calendar year shall be submitted by May 15th, annually.

Mr. Beckwith stated that the data is being compiled and will be submitted by May 15th.

Section II.C. of the NPDES permit states the BMP Plan shall contain all of the elements of Section II.C.1 a-m.

I requested and received a copy of the BMP Plan. Appended to this inspection report as Attachment III is a copy of the BMP Plan. The Plan contains all of the elements required except for item d (1) – (4). I discussed this issue with Mr. Beckwith and Mr. Beckwith showed me a file containing the facility's submittal of this BMP Plan in September 1997. According to Mr. Beckwith, EPA did not instruct the facility to amend the plan to include item d (1) – (4).

Section III states "A storm water pollution prevention plan shall be developed for the entire facility covered by this permit. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit."

I requested that Mr. Beckwith provide me with a copy of the SWPP. In March 2007, the facility received the results of an internal audit of the SWPP. A copy of the audit report is appended to this inspection report as Attachment IV. The SWPP, at the time of my inspection was still being amended and updated to address the issues noted in the audit report.

In addition, other required measures of the SWPP were provided in hard copy as follows:

Section III.d. of the permit states “In addition to or as part of the comprehensive site evaluation of this permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

The facility conducts a number of inspections to insure environmental compliance. Dry-dock inspections are conducted monthly and docks are also inspected prior to flood (pre-flood inspections). I reviewed the monthly as well as the pre-flood inspection reports. No discrepancies were noted. Appended to this inspection report as Attachment V are copies of the monthly dry dock inspection reports.

Section III.g of the permit states “The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges not addressed in this permit. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test....”

Mr. Beckwith provided me copies of the Storm Drain Discharge Approvals. I reviewed two years of Storm Drain Discharge Approvals. No discrepancies were noted.

Section III.4 of the permit states “Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once per year....”

I requested and received a copy of the 2006 Comprehensive Site Evaluation. Appended to this inspection report as Attachment IV is a copy of this document.

In addition, the facility (as part of addressing the current NOV) has requested and received permission under their Pretreatment Permit to increase their discharge to the sewer from 260,000 gpm to 400,000. A copy of the administratively extended permit and the letter allowing increase in the discharge are appended to this inspection report as Attachment VI.

FIELD INSPECTION

I arrived at the facility at 8:30 and again presented credentials to Mr. Beckwith and requested to begin with a tour of the facility. The Shipyard discharges drainage water from its six dry docks via Outfalls 018, 018A and 019. The discharge consists of ground water, storm water and ship's non-contact cooling water. The Shipyard's dry-dock drainage system is configured such that, normally, the drainage from Dry Docks 1 through 5 are commingled and discharged from either Outfall 018 or Outfall 18A. Dry Dock 6's drainage system is separate and discharges from

outfall 019. The Shipyard has installed Process Water Collection Systems (PWCS) in each of the dry docks to reduce the amount of copper being discharged. The PWCS segregate the runoff from the floors for the dry docks from the infiltrating ground water. Each PWCS includes a process controller that allows diverting the water from the floor of the dock to either the sanitary sewer or to a treatment system based on the amount of contaminants in the runoff. During periods when the PWCS controllers are not diverting the runoff water, the water combines with the rest of the dry dock drainage and discharges from the outfalls 018, 018A and 019.

Mr. Beckwith explained that each project at each dock has an EHS assigned to oversee and insure that environmental issues are properly addressed and that the shipyard BMPs are adhered to. As part of the facility walk-through, we either drove or walked to all of the dry-dock areas except dry-dock six. All areas within the dry-docks appeared to be properly maintained. Mr. Beckwith can monitor the turbidity and flow of the PWCS from his desk. If no activity is occurring within the dry-dock the drainage goes directly to the bay. Appended to this inspection report as Attachment I is a diagram showing the dry-dock stormwater collection system.

We also examined the sample point for outfall 021. Appended to this inspection report as Attachment I, is a schematic of the outfall treatment system. The ISCO composite sampler set at this site was in good operating condition and contained a thermometer registering 4 C at the time of inspection.

We drove over to the lab to review the chain of custody documents for the DMRs and to review the sampling chain of custody for samples collected on site and analyzed by the shipyard lab. According to Mr. Beckwith, the shipyard utilizes its own lab for analysis for all water-related sampling related to the NPDES permit. A review of the labs files found no irregularities or problems with the data.

OUTBRIEFING

After I completed the TSCA inspection, I returned to Mr. Beckwith's office and I provided all those that were present (same staff as attended the in-briefing) with a short out-briefing. I explained that EPA's procedure requires the inspector to submit copies of the inspection reports to the program and that the NPDES permit and compliance programs would determine any permit or compliance issues. Mr. Beckwith requested that a copy of this inspection report be sent to him. I explained that I would notify the NPDES Compliance Unit of his request and note it in my report, but that the Unit had six months from the date my report was received to review the report and make a determination of compliance or non-compliance and that the report usually was not released until the review process was complete. I thanked all present for their time and left the facility at 14:45 p.m.

ATTACHMENTS

1. General Facility Layout Diagram & Dry-Dock Drainage Diagrams
2. Facility response to NOV

3. BMP Plan
4. Engineering Assessment of SWPP
5. Monthly Dry Dock inspections
6. Comprehensive Site Compliance Evaluation
7. Pretreatment Permit/Admin. Extension/Allowance for increase in discharge

4-23-08
DATE REPORT SUBMITTED

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INSPECTOR'S SIGNATURE